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Questions of reinsurance  
A short guide



*Since the business of managing risk is both multifaceted and highly complex, we have compiled a brief lexicon explaining some of its many aspects, ranging from A as in America and alternative risk transfer through M as in markets and R as in risk to Z as in Zurich.*

*With approximately seventy keywords, this lexicon is intended to acquaint you better with the main concepts and terms associated with our operations and philosophy, our markets and methods, our products and services.*

*We hope it makes for enjoyable, informative reading. And if you should still have questions when you have finished, there is a list of references at the end indicating where you can find more in-depth information on any aspect of our business of managing risk.*



Minute objects can sometimes represent the biggest risks: a flaw in microchip production could cause losses running into the billions.

The alternative risk transfer (ART) markets fall into the grey area between reinsurance and corporate banking. ART business evolved due to the fact that it was becoming ever more difficult for the insurance industry to insure extremely large risks, and that it had therefore become necessary to develop new ways of dealing with risks. In ART, the focus is on developing innovative risk-transfer products and risk financing solutions that offer alternatives to the following elements of risk handling:

- Equalization mechanism (>law of large numbers)
- Distribution of risk from the ceding client to the risk carrier (>captive)
- Type of risk transferred (hard-to-insure or non-insurable risks and financial risks)
- Type of risk carrier (eg capital market, rather than an insurance company)

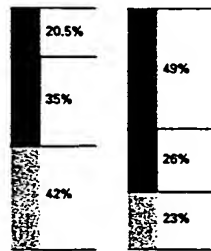
The ART markets are still the exclusive domain of financially powerful risk carriers that have well-diversified portfolios, possess the resources required for professional >risk management and are in a position to provide extensive underwriting capacity. Swiss Re has established itself in these markets through its division >Swiss Re New Markets, which has the task of opening up these new markets and complementing traditional reinsur-

ance solutions with products for alternative risk financing.

## America

North America continues to be the world's biggest insurance market. In 1995, North America accounted for 42 percent of all insurance in the >non-life segment (>Europe 35 percent, >Asia/Pacific 20 percent). In the >life segment, North America accounted for 23 percent of all business (Europe 26 percent, Asia/Pacific 49 percent). Swiss Re is represented in North America by Swiss Re America, Swiss Re Canada, Swiss Re Life & Health America, Swiss Re Life & Health Canada and Swiss Re New Markets. In Latin America, too, Swiss Re is continuing to expand its leading position. It has representatives in Mexico, Colombia, Venezuela, Argentina and Brazil.

Breakdown of world premium volume in life and non-life:



Legend: North America (white), Europe (dark grey), Asia/Pacific (light grey) (1995)

## Asia

Asia remains the region with the most major catastrophes. The statistics for 1996, for example, indicate that Asia suffered about half of all the >catastrophes registered around the world, with more than 70 percent of all fatalities, although many Asian countries have a low insurance density. Of the total global sum insured, Asia



Swiss Re's representative offices in Asia:

Bangkok  
Beijing  
Hong Kong  
Kuala Lumpur  
Manila  
Mumbai (Bombay)  
Seoul  
Shanghai  
Singapore  
Taipei  
Tokyo

as a region had a share of only 6.3 percent. Despite recent economic setbacks, experts believe that the demand for reinsurance in this region will double by the year 2000, particularly in the growth market of Southeast Asia. Swiss Re intends to increase substantially its business in the Asia/Pacific region, which in 1996 accounted for a good 10 percent of the Group's turnover. To achieve this, an increasing number of local >employees will be recruited, who will attend a specially designed training programme in preparation for new positions in their respective countries. In 1997, Swiss Re had 11 offices in Asia, and further offices are planned in Jakarta (Indonesia) and Vietnam.

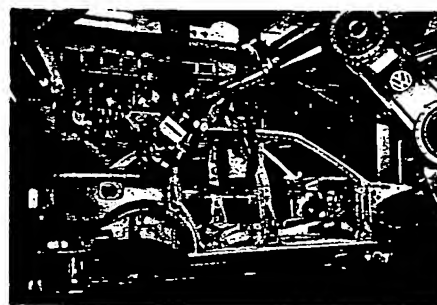
## Aviation

Aviation reinsurance provides protection against accident and liability risks, as well as hull damage in connection with the operation of aircraft. Policyholders are airlines, aircraft manufacturers and owners of airports.

Heavy traffic in the skies between the world's main cities: in 1996, airlines carried 1.4 billion passengers. By the year 2006, the figure may have doubled.



The two basic forms of >reinsurance are obligatory reinsurance (also called treaty reinsurance) and facultative reinsurance. In facultative reinsurance, the >direct insurer seeks reinsurance cover for individual >risks. In obligatory reinsurance, on the other hand, all the risks within a contractually de-



All branches of industry are more or less dependent upon the services and benefits provided by the insurance industry.

fined >portfolio are covered under the reinsurance contract or treaty. Both obligatory and facultative contracts may be concluded on a proportional or non-proportional basis. In proportional reinsurance, the reinsurer assumes a specific percentage of the liability which the direct insurer has accepted from the insured and for this, receives a corresponding share of the >premium. In the event of a loss, the reinsurer is liable for a proportional share, ie must pay the same percentage of the loss as it received of the premium. In non-proportional reinsurance (also excess of loss reinsurance), the reinsurer has no obligation to pay until the loss exceeds a specified

limit, ie the direct insurer's deductible. For this cover, the reinsurer receives a premium that is generally independent of the premium received by the direct insurer.

## Captives



Fortune 500's ranking of the world's ten biggest companies:

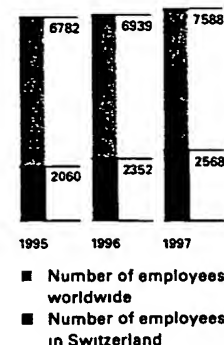
1. General Motors
2. Ford Motor
3. Mitsui
4. Mitsubishi
5. Royal Dutch/Shell
6. Itochu
7. Exxon
8. Wal-Mart stores
9. Marubeni
10. Sumitomo

(1997)

A captive is an insurance company that belongs to a major corporation or group and underwrites or reinsures primarily or exclusively the risks of firms belonging to that group. This arrangement offers the group two benefits: it reduces the group's distribution costs, and enables the group to retain control over its own risks. The captive affords direct access to the reinsurer and thus to significant net underwriting capacity since the protection provided by the reinsurer can be offered directly to the captive. In 1996, there were about 3 800 captives worldwide, of which one-third were domiciled in Bermuda. Captives play a special role in international business involving major risks. >Swiss Re New Markets offers captives tailored reinsurance solutions through its product units, as well as consulting and management services through its International Risk Management Group. >Alternative risk transfer, >Financial reinsurance

At Swiss Re, both specialists and generalists are in demand. There is no fixed, predefined course of training or education for the reinsurance industry. People from an extremely broad range of backgrounds come to work at Swiss Re. Nearly all of them acquire their specialized knowledge "on the job", which may take two to three years. To prepare themselves for new tasks, employees participate in further >training programmes. Swiss Re has a lot of things to offer that make a career attractive – for example the opportunity to spend time abroad, whether for training purposes or in a managerial role.

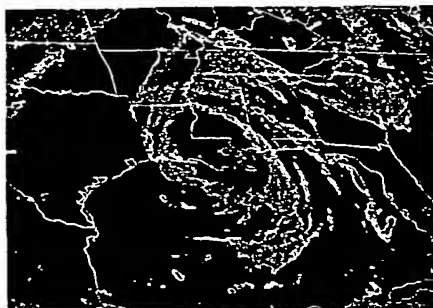
The number of people employed by the Swiss Re Group



## Catastrophes

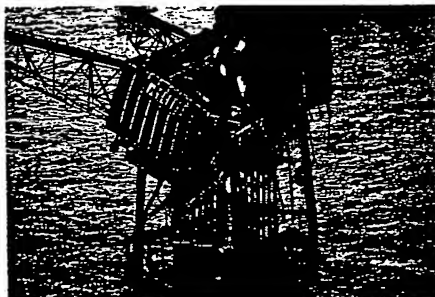
One of the central tasks of the reinsurer is to make an important contribution to coping with the financial consequences of catastrophes. Thus, catastrophes are one of the main bases for Swiss Re's business success. If they are assessed incorrectly, the company may be confronted with extremely high claims payments, and its very existence may be threatened. The fact is that catastrophe business is becoming ever more important for Swiss Re, but also ever riskier because the claims caused by tornadoes,

History's most costly natural catastrophe: a satellite picture of Hurricane Andrew, which caused losses of USD 18 billion in 1992.



greater number of and ever more expensive risks in exposed regions, and the scope of cover for these risks is being extended all the time. More and more often, Swiss Re is asked what the >insurance industry is doing to contain, avoid or at least render more bearable such high claims. Swiss Re is doing three things: first, it rejects as

History's biggest technical catastrophe: the explosion of the Piper Alpha drilling platform in 1988 caused a loss of USD 2.7 billion.



non-insurable risks which are too high and irresponsibly endanger the environment. Second, it is ready to make available its know-how and experience to support governments and society in developing strategies

for managing catastrophes. And third, it is developing a number of new >alternative risk transfer products to create additional capacity in the financial markets for major catastrophe risks.

See >Losses

## Claims

## Classes of business

Insurance business is generally divided into two main categories: >life and >non-life. Life includes >life and health insurance, while non-life includes all property/casualty insurance. At present, life business accounts for 58 percent of all direct insurance business worldwide, while non-life accounts for 42 percent.

Swiss Re's gross premiums by class of business 1997:  
100% = CHF 17 414 million



■ Property	23%
■ Liability	10%
■ Motor	14%
■ Accident/Health	18%
■ Other classes	15%
■ Life	20%

## Clients



What added value does Swiss Re create for its clients? The answer is provided in the publication "Insurance and risk capital: Swiss Re's value proposition".

Swiss Re's main clients are >direct insurers. Of the approximately 13 000 companies worldwide, more than half are domiciled in the western industrialized nations. Other clients that come to Swiss Re through the rapidly growing alternative risk transfer (ART) market are large corporations that have their own insurance companies (>captives), and also small to medium-sized enterprises such as large law firms in the US.

## Climate

Swiss Re is closely monitoring the climatic changes to be observed throughout the world because they affect its business, both directly and indirectly. Human activities can change the climate in global dimensions, resulting in more frequent extreme weather events with catastrophic effects. This hazard must be countered with global measures to protect the environment and climate, despite the fact that many questions remain unanswered. Swiss Re's involvement in climatic and environmental protection is based on its signing of the insurance industry's statement of commitment to the

environment within the scope of the United Nations Environment Programme (UNEP), its climate position paper and, at the corporate level, its own energy and environment policy. In addition, Swiss Re makes available its experience as a risk specialist in the



**The greenhouse effect and its consequences**  
The emissions of modern civilization are gradually destroying the ozone layer in the upper atmosphere and causing a continual increase in temperature. In some regions of the world, dry periods and drought will become more widespread, while other areas will receive more precipitation. These effects will cause drastic changes not just in vegetation, but also in the living conditions of many millions of people.

development of strategies for managing risks and losses. It also promotes a climate-compatible economy through public support and its conservation of energy and raw materials. Lastly, it makes technical and financial support available to promote and propagate knowledge of and dialogue on environmental and climatic protection.

## Competitors

In 1996, the world's four largest reinsurers in terms of premium volume had a market share of over 40 percent. These top four include Swiss Re, whose premium volume ranks it as the world's second largest reinsurer, behind Germany's Munich Re. Worldwide, there are about 400 reinsurers with a premium volume of approxi-



The market shares of the four biggest reinsurers in the world:



■ Munich Re	13.9%
■ Swiss Re	13.5%
■ General Re	7.5%
■ Employers Re	5.1%
■ Other firms	60.0%

(1996)

mately USD 100 billion (>markets). In addition to these professional reinsurers, many big >direct insurers also participate in reinsurance business, either through their own departments or through subsidiaries.

## Corporate identity

The impetus to develop and introduce a new corporate identity (CI) resulted from Swiss Re's strategic reorientation and refocusing on its core business of >reinsurance in mid-1995. The new CI is intended not only to lend Swiss Re higher profile as a modern, global company, but also to ensure that it establishes an independent brand image as an industry leader in the world markets.

The Swiss Re logo, the centrepiece of its new corporate identity, was introduced in a worldwide advertising campaign. The advertisements appeared in leading business publications.



## Credit and surety reinsurance

**Credit reinsurance** covers financial losses which suppliers suffer in the form of non-collectable accounts when customers become insolvent.

**Surety insurance** provides guarantees to customers or public authorities in the event that a company fails to fulfil its contractual obligations.

At Swiss Re, reinsurance for these risks is arranged by specialists from >Swiss Re New Markets.

## Cumulative risk

A number of >risks, for example several buildings or (re)insurance treaties that can be affected by one and the same loss event, are referred to as a cu-



In many natural catastrophes, one disaster is often followed by another. For example, after Mount Pinatubo erupted in the Philippines in June 1991, rainwater turned the ash into a dirty mass that caused extensive damage.

mulative risk. Such risks are seen chiefly in connection with natural catastrophes, but may also apply when different policies cover a single risk (eg offshore oil platforms).

Derivatives are financial products that derive their value from another, underlying instrument, which may be >shares, share indices, currency exchange rates, interest rates on loans or even commodities such as beef, wheat or crude oil. The basic types are futures, options and swaps, which are complemented by an abundance of variants and combinations. For some years now, stockmarkets have also allowed trading in insurance derivatives based on loss indices. In

The world's largest exchange for commodity futures is located in Chicago, where the Chicago Board of Trade (CBOT) started options trading in 1973.



addition to these standardized stock-market products, financial markets have recently begun to offer catastrophe and other insurance risks over the counter (OTC). In order to be offered in this manner, they must be securitized, ie packaged as securities. As a very simple example, one can imagine a bond that yields a rate of interest which varies according to loss experience. These instruments have the same purpose as the derivatives traded on stockmarkets, namely

to stimulate investors' interest in insurance risks that do not correlate with other investment risks, and thus to mobilize capital to cover catastrophe risks. >Alternative risk transfer, >Swiss Re New Markets

## Direct insurance

A direct insurer is an insurance company. It stands in a direct contractual relationship with the insured and is therefore also referred to as a primary insurer. Worldwide, there are an estimated 13 000 direct insurers. They insure natural and legal persons against the financial consequences of loss events, provided that the frequency and extent of these loss events can be calculated. >Insurance

The business of managing >risk is of course itself fraught with risk. In order to minimize this risk, direct insurers and reinsurers systematically diversify their risks, ie assemble >portfolios consisting of as many like, but mutually independent risks as



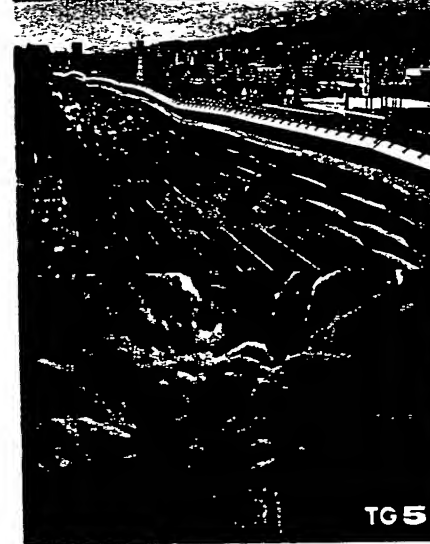
A portfolio's susceptibility to loss can be reduced by incorporating risks distributed throughout the world.

possible. The greater the number of such mutually independent insured risks, the less probable it becomes that all the risks will result in losses within the term of the insurance (as a rule, one year). The best diversified portfolios are those which combine risks not only from different lines of business, but also from different regions of the world. This offers the least probability of like losses occurring simultaneously. Swiss Re is now considered to be the best diversified reinsurer in the world.

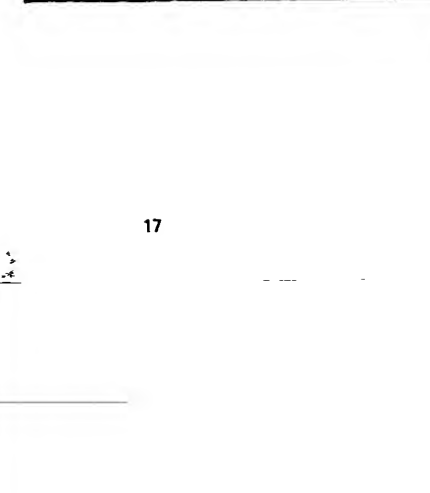
See >Catastrophes



1989  
the earthquake in  
San Francisco



1994  
the Northridge earthquake in Los Angeles



1995  
the great Hanshin earthquake in Kobe, Japan

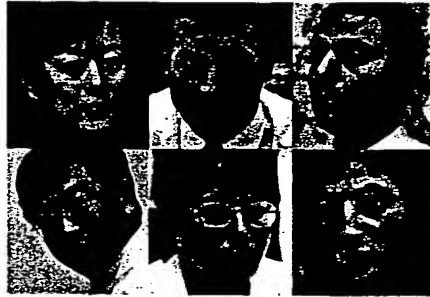
1997  
collapsed church in  
Umbria, Italy

TG5

## Employees

At the beginning of 1998, Swiss Re employed 7600 people at 70 locations throughout the world. These people come not just from banking and insurance backgrounds, but from all kinds of disciplines and include lawyers and engineers, physicists and economists, mathematicians and physicians, chemists and informatics

Swiss Re employees: from many different professions and from all around the world.

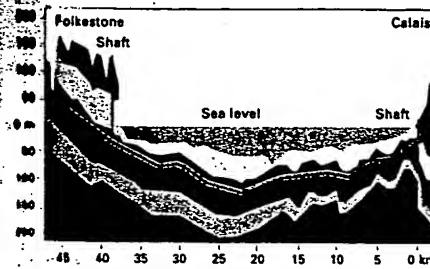


specialists, criminologists and toxicologists. In the reinsurance business, the human factor is especially important because, despite the advent of computer technology and global networking, reinsurance is and remains a person-to-person business based on long-term relationships and mutual trust. >Careers, >Training

## Engineering

In the insurance industry, the term engineering is used to denote the insurance of machinery and construc-

tion. It includes insurance for objects during their construction or erection, set up until the time they enter service, as well as insurance covering their operation. Engineering losses are increasing all over the world, which is attributable to the fact that growing



- Tunnel
- Grey chalk (more recent formation)
- Grey chalk
- Blue chalk
- Claystone
- Greensand

The Channel Tunnel between Calais and Folkestone was a project of truly monumental proportions – also with regard to underwriting – because neither its construction nor its ongoing operation would have been possible were it not for end-to-end insurance cover

pressure to perform and improve efficiency often results in safety measures being neglected and culminates in lower structural standards. This is why risk assessment and claims adjustment in the engineering segment require an especially high degree of competence.

## Equity capital

The equity capital of a (re)insurance company provides an indication of its solvency (>financial security). The greater a company's equity capital, the lower the probability of its financial ruin (at the end of 1997, Swiss Re's equity capital totalled more than CHF 14 billion). Most countries have introduced statutes requiring that a company's equity capital satisfy

certain minimum requirements. Other factors influencing equity capital are the management's risk propensity and the >volatility of the >portfolio (>diversification). In the case of insurance companies, equity capital serves not to finance operations, but to ensure a company's ability to pay claims. If, for example, loss experience – ie the total of the actual losses to be paid during the period of the insurance – is greater than the expected value – ie the statistical value taken

The return on equity (ROE) indicates the annual rate of return on the capital employed.

$$\text{Return on equity} = \frac{\text{Ordinary result}}{\text{Average amount of balance sheet equity capital}}$$

as a basis for calculating the risk premium – the difference between the two must be paid either from existing equalization provisions or from the company's equity capital, depending on the country where the company is domiciled. One way of compensating a lack of equity capital is to pass shares of the risks assumed along to other reinsurers (>retrocession). Thanks to its extraordinary financial strength, Swiss Re is in a position to dispense almost entirely with retrocession.

Europe is Swiss Re's main market for historical reasons (>history). In 1997, Swiss Re recorded more than 50 percent of its reinsurance business in Europe. The markets in Central and Eastern Europe are developing gradually, but will need many years yet before they reach a level of insurance penetration and density comparable with those of Western Europe. In the European insurance markets, the demand for reinsurance is tending to diminish as a result of the consolidation taking place in the direct insurance sector. Other factors influencing this trend are ongoing deregulation and the creation of the single European market. In 1996, Western Europe accounted for slightly less than 30 percent of world premium volume and thus had about the same share as North America. The >life segment exhibited stronger growth than the >non-life segment. Swiss Re intends to continue consolidating its strong market position in Europe through selective expansion, focusing to a greater extent on the opportunities resulting from >alternative risk transfer (ART) and life and health insurance (>Swiss Re Life & Health). In Europe, the Swiss Re Group has bases in Amsterdam, Cologne, Dublin, Hannover, London, Madrid, Milan, Moscow, Munich, Paris, Rome, Tallinn, Warsaw and Zurich.



More than 50% of Swiss Re's gross premium income originates from Europe.

Gross premiums by country 1997:  
100% = CHF 8952 million



■ Germany	26%
■ Great Britain	20%
■ France	10%
■ Switzerland	7%
■ Netherlands	9%
■ Other	28%

See >Basics

## Financial reinsurance

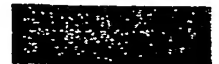
Financial reinsurance is a mixture of banking and reinsurance products. It is among the new, non-traditional solutions of >alternative risk transfer (ART). In financial reinsurance, for example, the client pays a higher >premium, which – in addition to the

New York's Nasdaq stock market: reinsurance and financial markets are cooperating ever more closely.



customary reinsurance procedure – is invested and earns interest for the client. Thus, the client has an extended cover that finances itself over the course of time. Financial reinsurance meets clients' needs for long-term planning and balancing cash flow and resources. The cover is limited over the entire, multi-year term of the treaty; the transfer of risk during the period of the treaty is of less significance. One elaboration of financial reinsurance is >finite risk reinsurance, which is developing rapidly, particularly in the US.

A (re)insurance company's financial security is determined by two things: **first**, its financial resources, and **second**, its commitment to fulfil the liabilities it has assumed. The (re)insurer's ability to pay (solvency) depends to a great extent on whether it **formed** adequate technical >provisions to cover the obligations it assumed and whether it possesses enough >equity capital as security. If the (re)insurer has insufficient assets (ie it is unable to pay due debts) or cannot sell its assets within a suitable period of time (ie lacks liquidity) in order to pay reported claims, it is insolvent. One measure of financial standing is the solvency ratio, ie the ratio of equity capital to premium income. Normally, the higher a company's solvency ratio is, the better its financial security. Swiss Re's financial security is given the highest possible rating by both the leading rating agencies, Standard & Poor's and Moody's.



Standard & Poor's and Moody's are independent rating agencies that specialize in assessing the risk represented by publicly traded securities. They give the results of their assessments, ie their ratings, in the form of letter combinations the best possible rating from Moody's is Triple A (Aaa) and that from Standard & Poor's is AAA. The assessments made by these rating agencies have a decisive influence on how companies fare in the securities market: the lower a company's rating, the greater a risk it is thought to be and, as a result, the higher the return on investment, or interest rate, demanded by investors.

## Finite risk reinsurance

Finite risk reinsurance is an elaboration of >financial reinsurance and numbers among the products in the >alternative risk transfer markets (ART). This type of reinsurance is also a combination of risk transfer

and risk financing – but involves more risk transfer than financial reinsurance, in which the current value of money assumes special significance. One feature of finite risk reinsurance is its multi-year term, which allows clients a longer-term cover at calcula-

years; and spread loss treaties (SLTs), which are used to manage financial risks associated with the time of payment.

Assumption of limited risk by the reinsurer

Sharing of the result with the direct insurer



Multi-year contract

Explicit inclusion of investment income

ble costs. Another feature of finite risk reinsurance is that a substantial portion of the profits accruing over a multi-year period is reimbursed to clients. Lastly, the income expected from investments is taken into account in calculating the premium. The main forms of finite risk reinsurance are: loss portfolio transfers (LPTs), in which the direct insurer transfers claims provisions to the finite reinsurer; adverse development covers (ADCs), in which the direct insurer acquires covers that extend beyond the claims provisions formed; finite quota shares (FQSs), which are covers that include the business of the current and of future underwriting

## See >Catastrophes



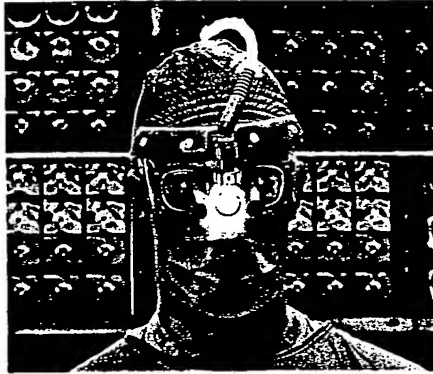
1993:  
the Mississippi overflows  
its banks

1995:  
flooding in northern  
Europe

1996:  
flooded city on Luzon,  
the main island in the  
Philippines

Health insurance provides protection against the financial consequences of illness or disability. The best known health insurance product is medical expense cover, which provides a varying range of benefits. Other types of health insurance include disability insurance, which pays an income for as long as the policyholder is unable

Modern medicine has its price: from 1985 to 1995, healthcare expenses in the OECD countries rose from 8.8% to 10% of the gross domestic product.



to work as a result of accident or illness, and long-term care insurance, which covers the costs of caring for the elderly at home or in residential care. Health insurance can be taken out by an individual or group policies can be set up for the benefit of employees.

Swiss Re Life & Health is a leading provider of reinsurance services to the world's life and health insurance markets. Clients benefit from Swiss Re Life & Health's knowledge-based expertise. The division carries out

state-of-the-art research into health product and risk management issues, sharing the resulting intelligence with clients worldwide.

## History

The concept of insurance – both direct insurance and reinsurance – surfaced for the first time in marine commerce. While the first accounts of marine insurance agreements date even from the pre-Christian era, the oldest known contract exhibiting features of reinsurance was concluded on 12 July 1370 in Genoa, Italy. In



Glarus, Switzerland, after the catastrophic fire of 10 and 11 May 1861.

the mid-19th century, devastating fires in German cities demonstrated that the insurance protection of that era was completely inadequate and thus led to the formation of the first professional reinsurance companies. The event that triggered the formation of Swiss Re was also a fire, namely in Glarus, Switzerland, in 1861. Two years after that fire, Swiss Reinsurance Company was founded by two banks, the Schweizerische Kredit-



anstalt of Zurich (Credit Suisse) and the Basler Handelsbank of Basle, together with the Helvetia General Insurance Company of St Gall. The development of reinsurance went hand in hand with the development of our modern industrial and service society. Cost-intensive machinery, increasing concentration of value in the rapidly growing cities, improved trade routes and faster means of transport called for higher, more rapidly available covers of a kind that can only be offered by specialized reinsurance companies designed to take advantage of international risk >diversification.

## Insurance

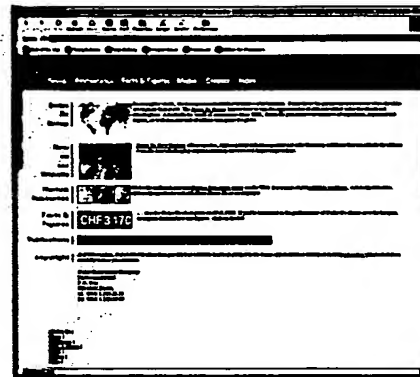
Premium income



■ Highly industrialized countries	90%
■ Rest of world	10%
(1996)	

All human activity entails risks. The purpose of insurance and insurance companies is to assume these risks against the payment of a sum of money, the >premium. In 1996, the premium income of the world's 13 000 insurance companies totalled USD 2 100 billion. About 90 percent of this sum originated from the highly industrialized, wealthy countries. (The country with the highest level of insurance was Japan, followed by Switzerland.)

Anyone interested in the various aspects of reinsurance can access an abundance of information online at Swiss Re's Website. The site plays a growing role in the knowledge transfer promoted by Swiss Re for many years through its >training programmes and top-quality series of >publications.



www.swissre.com  
Use this URL (Universal Resource Locator) to visit Swiss Re's Website

Visitors can view and download new brochures, texts and *sigma* reports from Swiss Re's Internet server free of charge.

## Investments

For Swiss Re, investing capital and managing assets are just as important as writing reinsurance because the earnings from its capital investments represent a major portion of its profits. In 1997, Swiss Re's investments totalled CHF 70.1 billion and consis-

Structure of investments  
as of 31 December 1997:  
100% = CHF 70 107 million



■ Fixed income securities	61%
■ Shares	27%
■ Real estate	5%
■ Investments in unconsolidated subsidiaries and affiliated companies	5%
■ Other	2%

ted of 61 percent fixed income securities, 27 percent >shares, five percent each for real estate and investments in unconsolidated subsidiaries and affiliated companies, and two percent other investments. The assets cover the technical >provisions and the >equity capital. Swiss Re's investment strategy is determined by considerations of security, profitability and marketability. Its great financial strength enables Swiss Re to orient its investment policy according to long-term criteria. As a rule, it invests its technical provisions in fixed income securities in the currencies of the countries in which it has assumed obligations. Swiss Re prefers to invest profits in shares, subsidiaries and affiliated companies.

## Law of large numbers



Jakob Bernoulli  
(1655-1705)

The law of large numbers, discovered around the year 1700 by Jakob Bernoulli, the mathematics professor and co-discoverer of probability theory, forms the basis of the modern >insurance industry: While it is impossible to predict either the time or the loss amount of adverse events in relation to individuals, the averages for a sufficiently large set (of insureds) exhibit certain patterns of loss frequency and loss extent.

General liability business deals with the (re)insurance of risks arising from commercial, product, business, professional and personal liability. In this area, the insurance industry sees itself confronted with growing problems resulting from societal, social and technical developments. In addition to the risks associated with technical progress, changes in legislation and in the nature of court decisions are exerting a greater influence on insurance business. This "risk of change" has made it nearly impossible for insurers and reinsurers to estimate the extent of claims to be expected. This applies particularly to liability claims relating to medicine, the environment, professional liability and genetic engineering. Here, Swiss Re intends not merely to adjust to developments in legislation, but to contribute to promoting an awareness of these risks. >Loss avoidance



Now nearly impossible  
for the insurance industry  
to estimate court-  
awarded damages

## Life and health insurance

Life insurance provides for the payment of a sum of money in the event of an insured's death, or, in the case of endowment insurance, when the insured survives a certain period of time. The benefits of a life policy consist in the payment of a contractually



Swiss Re's division Swiss Re Life & Health, the world's leading life and health reinsurer, has its headquarters in London.

stipulated sum of money in the case of capital sum insurance or of regular income payments in the case of annuity or pension insurance. Health insurance provides protection against the financial consequences of illness and disability. In this insurance market, which is referred to merely as >life insurance in the industry, Swiss Re is now the world's leading reinsurer. From its headquarters in London, it operates worldwide under the name >Swiss Re Life & Health. One of Swiss Re's strengths in the field of life insurance is the assessment of "substandard" risks, ie of insureds with special health problems. Swiss Re has pioneered work in this area for many years and regularly publishes the latest findings of medical research in its own rating manuals.

## Life insurance

Life insurance provides financial benefit for dependants in the event of an insured's death. There are three basic types of life policy – term insurance, where cover is provided for a specified number of years, whole life insurance and endowment insurance, which pay a sum of money after an agreed period of time, or on the death of the policyholder. A variation on the traditional life policy is critical illness insurance, which pays out a lump sum on the diagnosis of certain

life-threatening illnesses specified in the policy. Life insurance can be taken out by an individual or group policies can be set up for the benefit of employees. Clients benefit from Swiss Re Life & Health's knowledge-based expertise. The division carries



Life insurance faces the challenges of greater life expectancy, new illnesses and the reorganization of government-run welfare/social programmes

out state-of-the-art research into life product and risk management issues, sharing the resulting intelligence with clients worldwide.

## Loss avoidance

In view of the constant increase in losses and the limited funds available to pay them, the >insurance industry is confronted with the problem of finding means to avoid, contain or at least make bearable the extent of losses. When strategies for dealing with catastrophes are called for – and not just in the underwriting sphere – Swiss Re makes available its know-how and experience. It also develops new >alternative risk transfer (ART) products in order to procure addi-

Hurricane exposure in the US: wind speeds with a 100-year return period.

Peak gust velocities of:

- 40-55 m/sec
- 55-70 m/sec
- 70-85 m/sec
- 85-100 m/sec



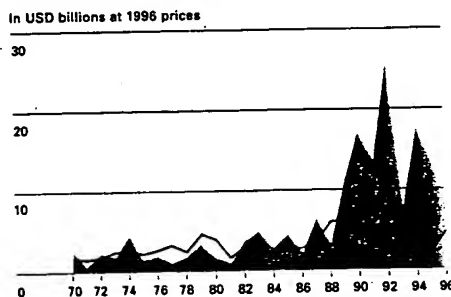
tional capacity from the financial markets for covering major catastrophe risks.

## Losses

A loss is generally understood to be an instance of damage, destruction, or material or immaterial loss. In the insurance industry, a loss or claim is used to denote the amount that the

Trends in insured losses from 1970 to 1996

- Natural catastrophes
- Man-made catastrophes



insurer must pay if the insured event (>risk) occurs. In most cases, the treaty between the >direct insurer and >reinsurer contains a clause that gives the direct insurer the right to accept

and settle, but also to reject a claim. In keeping with its duty to follow the actions of the direct insurer, the reinsurer complies with the direct insurer's decision. Swiss Re is renowned for its prompt and fair settlement of claims. Once a request for cash settlement has been received, it generally takes only a few hours or days for it to be paid. Swiss Re pays an average of about CHF 25 million in claims every day.

## Major losses

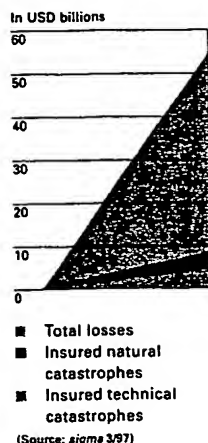
To the insurance industry, loss events represent experience which can be of use in the future. Swiss Re compiles and evaluates statistics on the loss events



Although built only six years earlier, in 1995 the Sampoong department store in Seoul, Korea, collapsed burying nearly 2 000 people under debris, killing 500 and injuring 900

that occur each year. In 1996 (a typical year), it registered 341 major losses in which about 22 000 people died. The insured loss amounted to USD 12.3 billion. Natural catastrophes accounted for losses of USD 7.9 billion, of which damage totalling USD 1.6 billion was caused in the US by Hurricane Fran

#### Overview of major losses in 1996



alone. The total loss caused by all registered natural catastrophes, ie both insured and uninsured losses, amounted to about USD 50 billion. Technical >catastrophes totalled USD 4.4 billion; these included the major fires at Crédit Lyonnais (USD 404 million), at Düsseldorf airport (USD 315 million) and in the Channel Tunnel (USD 366 million). Insured losses were distributed as follows: 21.6 percent in Europe, 65.9 percent in America, 8.7 percent in Asia, 0.8 percent in Africa and 3.0 percent at sea and in space. With a 63.7 percent share, the US was by far the country with the most insured losses. Asia had by far the most victims, with 15 761 or 70.9 percent of all fatalities.

## Marine

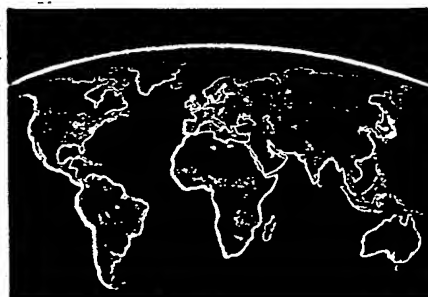


Well over 90% of all goods shipped worldwide go by sea.

Marine insurance dates from the very beginnings of the insurance industry (>history). Today, it is still an exciting, global business. For the insurance industry, assessing >risks is never a matter of routine, and if there is one thing to be counted on, it is that there will probably be surprises. Marine (re)insurance includes anything and everything that has to be transported on water, over land or in the air. It may be crude oil, drilling platforms or works of art. While the significance of marine insurance has diminished

within the overall context of insurance business in recent decades, the premium volume exhibits a positive trend attributable to the high values of the insured risks. Large crude oil and gas offshore projects have insured values of about USD 3 billion.

In 1996, worldwide premium income in the reinsurance market amounted to approximately USD 100 billion. Of that sum, 40 percent was recorded by the world's four largest reinsurers



Light and shadow: the points of light discernible on this map indicate the influence of human civilization on the earth. The larger light sources in the northern hemisphere are conurbations, while most of the brighter points of light in the southern hemisphere are either grassland fires or fires set to clear land

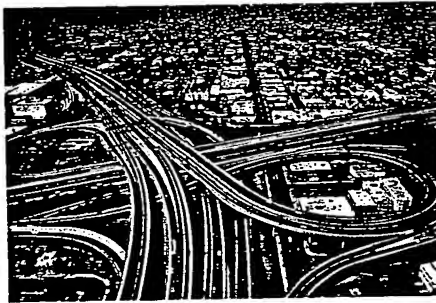
alone – Munich Re, Swiss Re, General Re and Employers Re (>competitors), up from 22 percent in 1986. This trend towards larger, more financially secure reinsurers will probably continue. In the past, the reinsurance market developed parallel to the insurance market, which in turn grew in proportion to the overall economy. In 1997, Swiss Re did about 51.5 percent of its business in >Europe, 35 percent in North and South America, 11 per-

cent in >Asia and 2.5 percent in Africa. This global distribution of business contributes to the stability of Swiss Re's >results and permits the Group to offer efficient services to its clients everywhere. >Services

## Motor insurance

With a worldwide premium volume of about USD 350 billion in 1996, motor insurance is Swiss Re's second largest >class of business after >life insurance. The substantial volume of

Around the turn of the millennium, the world will have more than 700 million cars.



reinsurance comes for the most part from >liability and collision insurance. In the liability sphere, the focus is on fixing the final claims costs for severe injuries with run-off periods of twenty or more years. In the collision sphere, the focus is on designing, for example, risk-appropriate reinsurance protection against hailstone damage. A hailstorm over a large city can cause vehicle damage running into the hundreds of millions.

Nuclear energy insurance covers property damage, liability and accident risks entailed in the operation of nuclear installations.

# Portfolio

The term portfolio denotes a collection of >risks that have been accepted by a >direct insurer or >reinsurer. A given portfolio is said to be balanced if it contains a large number of risks of a similar nature and of equivalent value, for example a large direct insurer's portfolio of car policies. Here, the >law of large numbers suggests that the claims ratio, ie the ratio of >claims to >premiums, should fluctuate only

The principal rule for assembling a balanced portfolio is to accept as many risks of similar nature and equivalent value as possible.

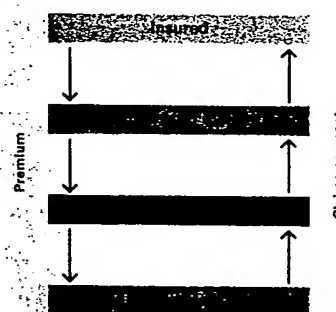


insignificantly from one year to the next. This is why there is relatively little need to reinsure a balanced portfolio. Unbalanced portfolios, on the other hand, are those which include relatively few major risks, for example portfolios of >aviation or >nuclear energy risks. Since such risks can never be covered by a single insurer and often not even by one individual reinsurer, national pools are created. In this way, the heaviest risks are divided among as many of the respective country's insurers as possible. Between the two extremes of balanced and unbalanced portfolios,

there are portfolios of fire, accident, >liability, >marine and >life policies with normal, albeit different requirements for reinsurance cover.

# Premium

The premium is the sum which the insured pays the insurer for accepting or covering a >risk. If considered more closely, premiums may be seen to be of different types. For instance, the fee paid by a >direct insurer to a >reinsurer is called a reinsurance



From premiums to claims payments.

premium, while the amount that becomes due and payable when one reinsurer passes along part of a risk to another reinsurer (>retrocession) is referred to as a retrocession premium. The term "gross premium" is understood to be the sum of all premiums, while in the case of "net premium", all reinsurance and retrocession premiums have been deducted. The unearned premium is the share of the premium that has not yet been earned

as of the balance sheet date and must still serve to cover the risk in the new financial year (>provisions). The earned premium in a given financial year is the premium income attributable to that business year, including the unearned premium from the preceding year.

## Property



A multimillion dollar property risk.

Considered on the basis of premium income, property insurance is by far the most important >non-life class of business reinsured by Swiss Re. It comprises all lines in which property is insured against damage, destruction or loss and thus includes fire, burglary, fidelity guarantee, hail, water damage and plate glass insurance, natural perils and livestock insurance. The most important line is fire insurance, which usually covers not just damage caused by fire, but also hazards such as explosion, lightning and falling aircraft. In many countries, fire policies also cover damage resulting from natural perils (damage caused by natural catastrophes such as high water, flooding, windstorms, volcanic eruptions and earthquakes). The changes in >climate provide grounds to fear that claims will increase both in frequency and scope in this line.

## Proportional reinsurance

In proportional reinsurance, the reinsurer assumes a percentage of the liability which the direct insurer accepted from the insured and, for this service, receives a corresponding percentage of the >premium. In the event of a claim, the reinsurer is proportionately liable, that is to say it must pay the same percentage of the claim as it received in the premium. Through proportional treaty reinsurance, direct insurers can protect themselves against major fluctuations in the loss experience of entire portfolios due to economic cycles, new legislation or social change (risk of change and risk of random fluctuation). >Basics

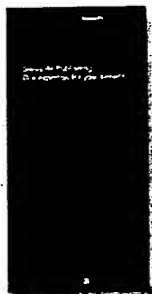
## Provisions

In contrast to its >equity capital, the money that Swiss Re places in provisions (or reserves) is primarily capital from outside sources. To ensure its ability to pay future claims, Swiss Re is required by law to form technical provisions. These consist of provisions for unearned >premiums, provisions for claims incurred but not reported or not yet finally settled and provisions for life, health and disability reinsurance (endowment and insurance annuity). There are also provisions for future catastrophe claims



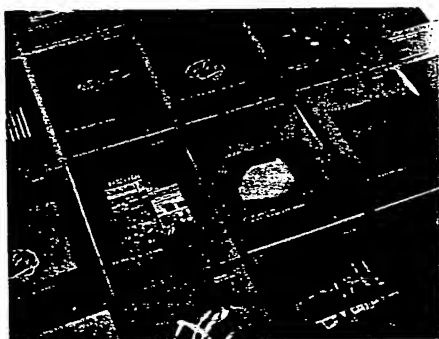
and special risks. In the event that these provisions should prove to be inadequate, however, Swiss Re will have to pay claims from its own equity capital.

## Publications



Swiss Re Publishing Index 1998.

Each year, Swiss Re publishes its findings regarding the risks of this world and discusses ways of dealing with them. This knowledge is communicated in more than 70 publications in English, German, French, Spanish, Portuguese and Italian, as well as via



the >Internet. An index of Swiss Re's publications and the publications themselves can be ordered free of charge from Swiss Re, Corporate Communications, PO Box, 8022 Zurich, Switzerland, fax +41 1 285 20 23, or via e-mail from [publications@swissre.com](mailto:publications@swissre.com). Recent publications can also be downloaded directly from Swiss Re's Website ([www.swissre.com](http://www.swissre.com)).

Reinsurance is insurance for insurance companies. It covers part of the >risks assumed by the >direct insurer and thus reduces the risk that the direct insurer will experience liquidity problems or even suffer financial ruin as the result of a major loss. Further advantages for the direct insurer are that its >portfolio is made more homogeneous because risks with high sums insured and high exposures can be reinsured; its underwriting capacity is greater because the reinsurer assumes a share of the risks, and thus makes part of the required provisions available; and its available >equity capital is increased because reinsurance frees equity capital bound by risks. In addition to these and other advantages, reinsurance also contributes to the creation of significant added value (>value proposition). As a reinsurer, Swiss Re is an institution for handling risks. Since no part of the world is without risk, Swiss Re also has significance for the economy as a whole. Every innovation, each step forward also signifies risk. Traditional reinsurance business covers accident and >property/casualty business (>classes of business) as well as >life and health reinsurance. Recent years have seen the advent of new types of reinsurance in the alternative risk transfer market (ART), where growth has been strong.



Kuala Lumpur's Petronas Towers, symbol of one of Asia's aspiring economies where demand for reinsurance is growing in proportion to increasing economic power.

## Result



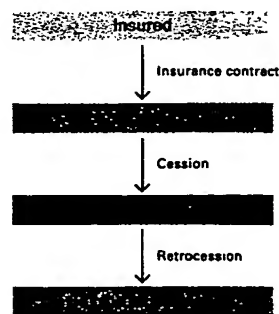
Swiss Re's annual and interim reports: information for shareholders and the general public.

In Swiss Re's profit and loss account, two terms are used that are important for assessing the company's earning power: technical result and investment result. The technical result is the difference between the total of all >losses and the total of all >premiums. In other words, the technical result is the balance resulting from premium income plus interest earned on >provisions minus claims expenditure, commission payments and the costs of reinsurance operations. The investment result is total earnings and profits, less losses, valuation adjustments and administration expenses. In 1997, Swiss Re's investment result was just under four times higher than its technical result. Profitability is expressed by the return on equity (ROE), ie the ratio of the result to the average capital funds employed during the financial year.

## Retrocession

Retrocession means "further reinsurance" and is usually the last link in the risk-sharing chain. The insured concludes an insurance contract with the >direct insurer. The insurer accepts the >risk, for which it is fully liable to the customer. If it does not wish to keep the entire risk, the direct

insurer cedes part of the risk to one or more reinsurers. The reinsurer accepts part of the risk and, as cessionary, is in turn liable to the cedent. If the reinsurer, too, does not wish to keep all of its share in the risk, it ret-



Double security through cession and retrocession

rocedes (or cedes again) some of its share of the risk to one or more other reinsurers, which as retrocessionnaires are liable for their respective shares to the retrocedent. Swiss Re is so strong financially that, of the world's ten largest reinsurers, it is the one with the smallest share of retrocession.

## Risk

The term risk has several meanings, the most common one being hazard. Precisely speaking, a risk is a possible hazard that is measured in terms of the probability that a >loss will occur and the scope or consequences that it will have. In insurance jargon, however, the term risk is also used to denote insured objects, perils or in-

terests. The danger that the actual loss experience will be greater than expected is referred to as the risk of random fluctuation (>volatility). The risk of change threatens when actual loss experience fluctuates from that which is statistically anticipated as a result of technical, social, economic or political changes (for example, the dramatic

Hazard or danger? Risk stems from the early Italian "risicare", which meant "to dare". This means that risk denotes a conscious selection of an alternative, rather than a question of fate.



increase in car theft following the fall of the Iron Curtain). The risk of error is based on erroneous assumptions or miscalculations. As a reinsurer, Swiss Re is situated at the end of the risk-sharing chain. This chain begins with risk perception and assessment, extends through >risk management and risk assumption and ends with risk spread, ie the creation of portfolios consisting of as many similar risks as possible. >Diversification, >Portfolio

Risk management is a discipline that offers methods for identifying and assessing risks on the basis of scientific, technical, economic and statistical experience. The aim of risk management is to implement technical and organizational measures to avoid or at least reduce potential losses. The risks that then remain must be made financially bearable through the creation of special provisions (self-insurance) or by transferring (parts of)



Risk management also deals with new hazards such as the phenomenon of rural/urban fires

the risks to other insurers. A variety of risk management teams at Swiss Re deal with the risks involved in entrepreneurial activity. These teams are composed of engineers, scientists, physicians, mathematicians and economists and are available in a consultative capacity to specialists in the various classes of reinsurance business, as well as to clients. In addition to these product- and client-oriented service centres, Swiss Re's Corporate Integrated Risk Management also monitors the group's overall risk situation.

## Run-off management

Run-off management is the handling of claims from cancelled insurance and reinsurance covers, particularly where loss experience has been adverse. Swiss Re New Markets offers run-off management as a service to the insurance industry, processing "orphaned" claims efficiently and aiding clients to clear their balance sheets through the transfer of loss portfolios.

## Rüschlikon

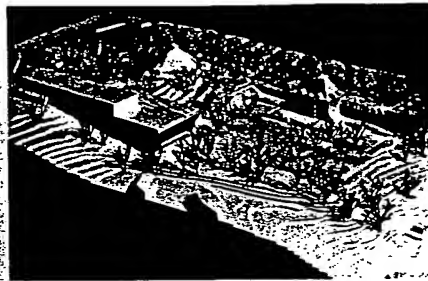
Since the business of managing risk depends to a large extent on the knowledge and abilities of its >em-

The former Villa Bodmer with its extensive park grounds will form the nucleus of Swiss Re's new communications facilities.



ployees, Swiss Re relies on continual, intensive training in all relevant areas. From mid-2000, much of this knowledge transfer will take place in the Group's new communications centre, to be built in the grounds of the former Villa Bodmer, in Rüschlikon, near Zurich. The villa, a listed historical monument, will be used as a guest

house and meeting centre. In the park, which offers a view across Lake Zurich, a seminar centre with 50 guest rooms and a forum for about 300 people is now under construction. The seminar centre is designed not only to meet the demanding know-



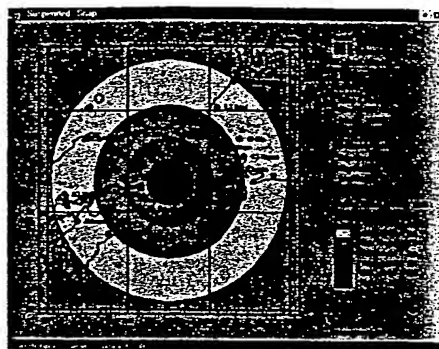
Seminar centre with a view of the lake from the designs submitted by 12 Swiss architectural firms invited to participate in the competition in 1995, the jury selected the project from Marcel Meili and Markus Peter of Zurich

how transfer requirements of a worldwide corporate group, but also to serve as a setting for receptions and meetings with representatives from industry, politics and the public at large. >Training

## Services

Since Swiss Re sees itself as a service company, it offers its >clients a broad spectrum of services. For example, Swiss Re makes its know-how available to clients within the framework of individual consulting as well as through periodicals and topical >publications. Swiss Re supports its clients in solving underwriting problems and advises them on issues in financial and >risk management, prepares risk profiles as a basis for tailored covers

The Swiss Re Natural Perils Program (SNAP) allows underwriters to prepare earthquake risk analyses on PCs. The program can also be used to calculate risk premiums.



models which it has developed itself, Swiss Re simulates the consequences of >windstorms, >earthquakes and gascloud explosions. And last, but by no means least, clients and their >employees can receive further training in Swiss Re seminars and >training programmes.

## Shares



A Swiss Re registered share.

Swiss Re shares are traded on the Swiss Exchange, SWX. The share capital amounts to CHF 150 million and is held by 40 000 shareholders (as of March 1998). Between the beginning of 1994 and the beginning of 1998, Swiss Re shares quadrupled in price, rising from CHF 700 to CHF 2 800 and thus performing well above the market average. Shares are also the second most important item in Swiss

Re's >investments. At the beginning of 1998, Swiss Re managed a share portfolio with a market value of more than CHF 18 billion, which is equivalent to about a quarter of the Group's total capital investments.

## SITC

The Swiss Insurance Training Centre (SITC) was founded by Swiss Re in 1963. The centre conducts courses on lines of business, management and insurance organization, to which participants from the insurance industries of Asia, Europe, Latin America



Thus far, guests from more than 100 countries have participated in the courses conducted by the Swiss Insurance Training Centre (SITC).

and Africa are invited. Thus far, more than 2 500 guests from more than 100 countries have participated in the (free) SITC courses. The courses are conducted in English or Spanish. As an educational institution endowed by Swiss Re, the SITC is under independent management. >Training

# Swiss Re Life & Health

Swiss Re Life & Health creates economic value for its clients – life and health insurers worldwide – by delivering expert risk management solutions across a wide range of products including life, critical illness, disability income, medical expense and long-term care. By sharing risk and knowledge the division aims to improve clients' financial performance,

A new human being comes into the world every half second.



stabilizing and enhancing their profitability, optimizing capital use and enabling faster growth. Headquartered in London, the division operates through a network of 37 offices in 28 countries, serving clients in virtually every country in the world. In 1996 the premium volume for life business globally (a generic term for both life and health insurance) amounted to USD 1200 billion and trends indicate that this figure will continue to grow. The factors fuelling this growth include the ongoing deregulation of the insurance industry, demand from

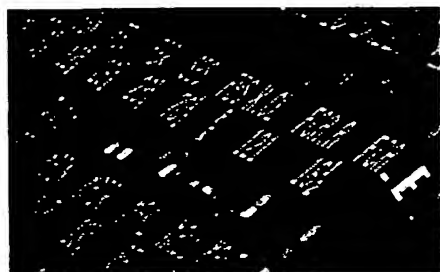
the previously untapped markets of Asia, Latin America and Eastern Europe, plus demographic changes and increased life expectancy that are impacting social welfare programmes. Clients benefit from Swiss Re Life & Health's knowledge-based expertise. The division carries out state-of-the-art research into life and health issues, sharing the resulting intelligence with clients worldwide.

## Swiss Re New Markets

The task of Swiss Re New Markets is to open up new markets and to provide major corporations and insurers with integrated risk management solutions consisting of traditional reinsurance complemented by innovative financial products. The needs of large, multinational service and industrial enterprises are changing rapidly and substantially. Particularly as globalization and deregulation have given rise to tougher competition on the world markets, there has been a dramatic increase in the demand for means of securing financial strength and stability. In order to be in a position to satisfy this demand, Swiss Re New Markets offers comprehensive risk-transfer and risk-financing solutions, that, in addition to the familiar risks, also cover financial risks. In doing so, Swiss Re New Markets is adhering to the principle that each client and

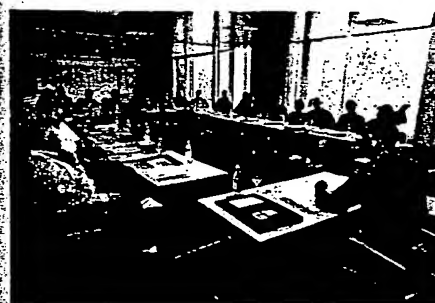
each business is unique. Reflecting this need for flexibility and functionality, it is organized in three product groups: Financial Solutions (for structured financial and capital market products), Risk Services (for >captive management services, >run-off management, risk engineering and risk

New challenges, new markets: the growing demand for insurance protection against ever more complex risks calls for innovative solutions that combine traditional reinsurance offerings with modern financial products.



advisory services) and Underwriting (for property and casualty relating to industrial segments, >credit and surety and >aviation). Multidisciplinary teams formed on an ad hoc basis prepare tailor-made solutions using the broad spectrum of expertise from throughout the Swiss Re Group. Historically, Swiss Re prepared alternative risk transfer solutions under the guise of its former ART division, establishing itself as a leader among the few companies providing comprehensive, integrated risk management for larger corporations and insurers. In mid-1997, these activities were consolidated in the new, global Swiss Re New Markets.

The world of risk is multifaceted and subject to constant change. This is why Swiss Re places such emphasis on training. At Swiss Re, >employees can receive basic and further training, both internally and externally, in various subjects and languages, in management seminars and advanced training seminars. Swiss Re also passes its know-how and experience along to clients and business partners in



Basic and further training at Swiss Re.

seminars and presentations on selected topics, as well as in courses conducted at the Swiss Insurance Training Centre (>SITC). Swiss Re also makes its expertise available to a broader segment of the public through its >publications and its >Internet Website ([www.swissre.com](http://www.swissre.com)). >Rüschlikon

# Treaty reinsurance

See >Basics

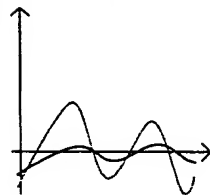
## Underwriting capacity

Underwriting capacity, also often referred to as risk capacity, is the maximum total amount of individual and cumulative risks which a (re)insurer is capable of assuming. By ceding risks to reinsurers (retrocessionnaires), >direct insurers and reinsurers can substantially expand their underwriting capacities.

>Retrocession

## Value proposition

Reinsurance reduces portfolio volatility:



- Risk of random fluctuation before reinsurance
- Risk of random fluctuation after reinsurance

Reinsurance contributes to the creation of measurable added value for >direct insurers. This added value is discernible in the return on equity (ROE), which improves because >reinsurance allows direct insurers to reduce their capital costs. Insurance companies procure capital from the capital markets and have to pay a price (interest) for it, which in the risk business is generally higher than with other, less risky capital investments. Reinsurance offers a more cost-effective alternative because the reinsurer assumes not only risk peaks and catas-

trophe loads from the direct insurer, but also ensures at the same time that the need for >equity capital and thus also the cost of capital are reduced. As soon as the savings outweigh the reduction in the gross result due to the reinsurance costs, the direct insurer's return on equity improves. The savings effect occurs because reinsurers such as Swiss Re have superior portfolio >diversification and thus require less additional equity capital to assume risks than direct insurers do.

## Volatility

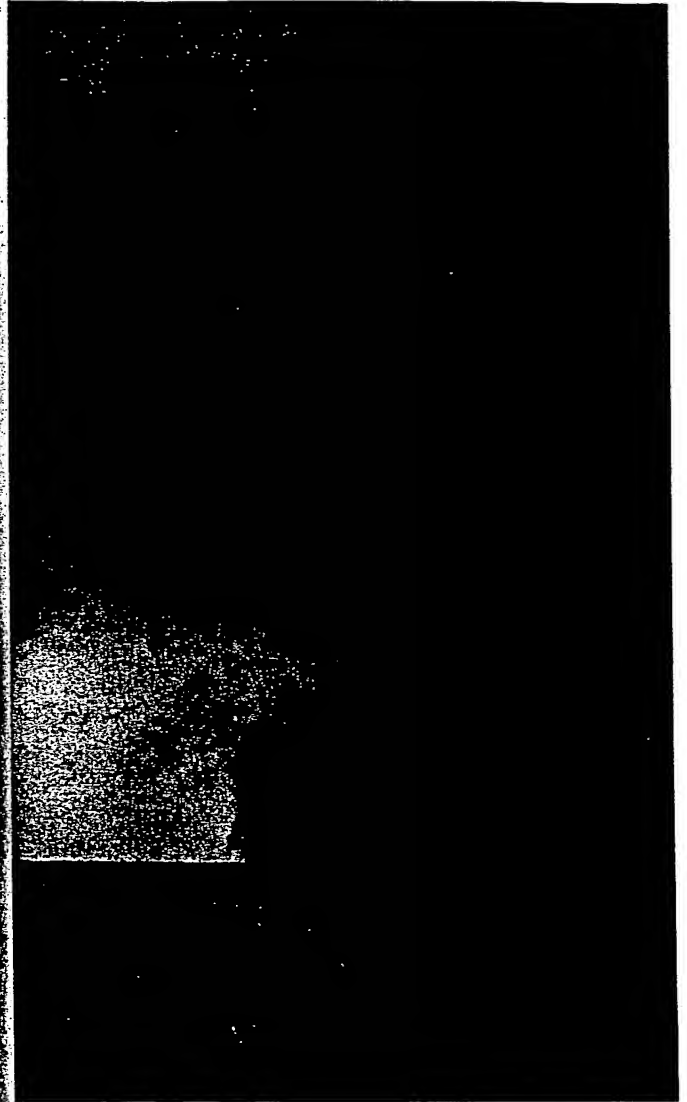
Volatility is generally used in the financial sphere to denote the susceptibility to fluctuations in, for example, exchange rates, share prices, income, interest and other prices. In the insurance industry, this term is used primarily to denote the risk of random fluctuation in the losses occurring within a >portfolio. Each portfolio has a certain expected loss ratio, which is calculated on the basis of experience values and scenarios for the future. This expected value is taken as the basis for calculating the >premium. Because individual >losses always occur purely by chance and vary in extent, however, they give rise to fluctuations, which are generally referred to as the risk of random fluctuation. This risk, which can be determined



actuarially, affects the need for capital and thus ultimately the insurer's profitability. Increased volatility results from the effect of >cumulative risk in cases where several insured >risks may be affected by a single loss event. One of the main tasks of >risk management is to reduce the risk of random fluctuation inherent in a given insurance portfolio through >diversification.

## Windstorms

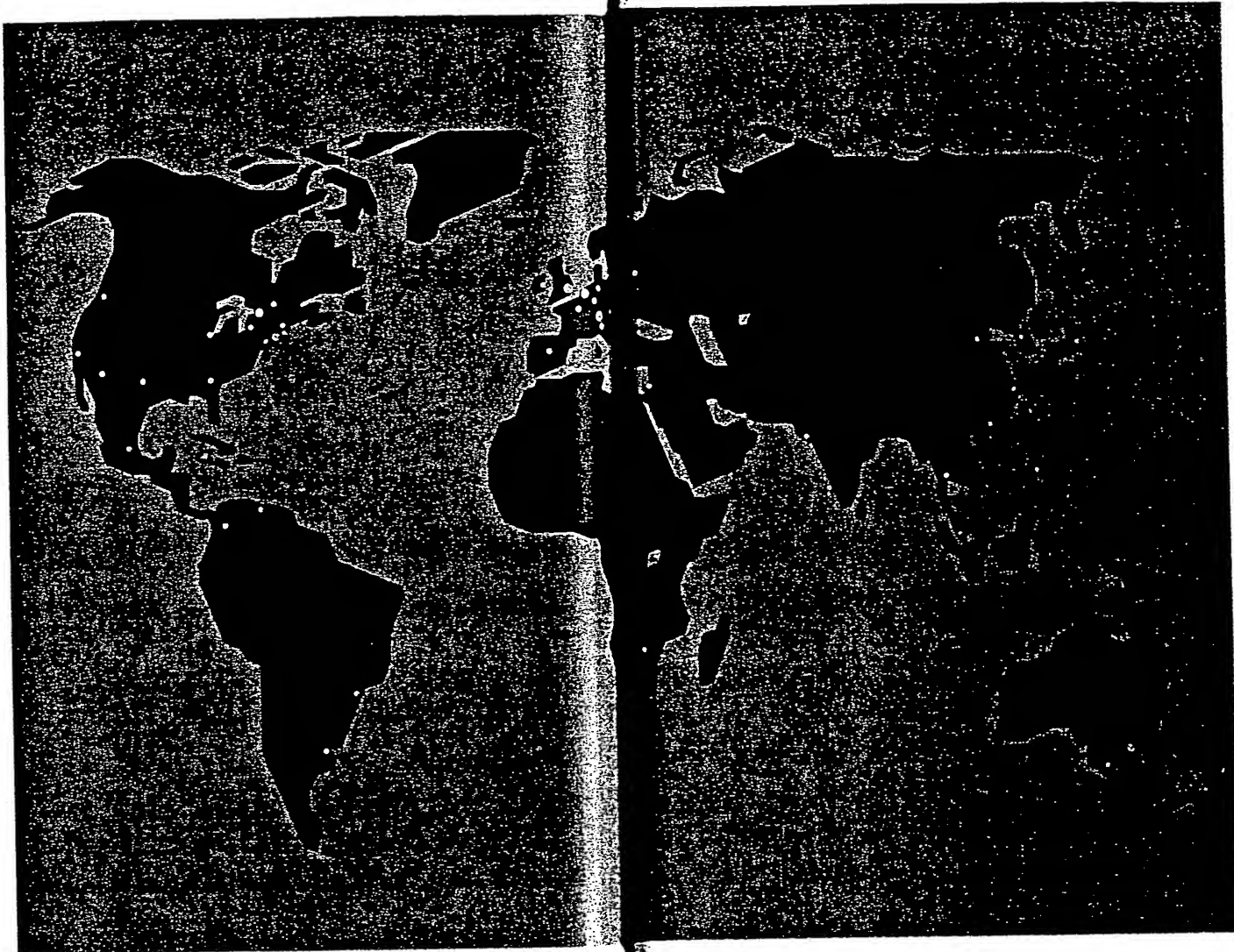
See >Catastrophes



Tornado over Union City  
in the US.

## Worldwide

Swiss Re, with more than 70 locations, is represented on all continents in over 30 countries and in all of the world's major insurance markets.



Swiss Re's head office has been located in Zurich since the company was formed in 1863, and on the banks of Lake Zurich on Mythenquai since 1913. Today, Greater Zurich has a population of about one million. The city on the River Limmat is home to a large number of major banks and insurance companies. Zurich is also the home of the Swiss Exchange, one of the largest in Europe.

Swiss Re's headquarters on Lake Zurich.



Of course, with less than 80 pages, this compendium cannot shed light on every aspect of a business with as many facets as reinsurance. Swiss Re has published an extensive collection of material on the risks of this world and how Swiss Re deals with them. You are welcome to select whatever interests you and order it from:

Swiss Re  
Corporate Communications  
PO Box  
CH-8022 Zurich  
Switzerland  
Fax: + 41 1 285 20 23 or  
E-mail: [publications@swissre.com](mailto:publications@swissre.com)



## *Swiss Re Publishing Index 1998*

This index, which is revised each year, lists the entire range of Swiss Re publications. It provides a guide through natural catastrophes, technology and industry, society, life and health, liability, aviation and marine, insurance technique, integrated risk financing solutions, periodicals, flyers, Swiss Re and Internet publishing, in five languages.



### *Annual Report*

The Annual Report, statement of accounts and report of the divisions on the past financial year of Swiss Re, Zurich, and the Swiss Re Group.



### *Here's your chance*

This publication provides an introduction to Swiss Re as an organization and as an employer, and offers potential applicants an initial guide to career opportunities with the company.



### *Insurance and risk capital: Swiss Re's value proposition*

If Swiss Re wants to create a measurable economic benefit for its clients, it should also help to improve the direct insurer's return on equity. This publication indicates how and in what way Swiss Re creates added value for its clients.



### *sigma*

*sigma* tackles economic issues, market trends and their effects on the insurance industry, structural changes in the different markets and lines as well as international comparisons. For its outstanding research reports, Swiss Re's *sigma* series won the "Analyst/Researcher of the Year" award in 1995 and 1997. *sigma* is published in German, English, French, Italian and Spanish and is also available on Swiss Re's Website.



### *Swiss Re on video*

The video "Risk is our business" provides concise information on Swiss Re.

### *Internet*

Swiss Re offers a wealth of information on the company to a broad spectrum of user groups on its Website ([www.swissre.com](http://www.swissre.com)), under the headings "Group", "Reinsurance", "Facts & Figures", "Media" and "Contact".

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CH-8022 Zurich  
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E-mail: [publications@swissre.com](mailto:publications@swissre.com)  
Internet: [www.swissre.com](http://www.swissre.com)

Title: Questions of reinsurance. A short guide  
Produced by: Swiss Re Publishing  
Translation by Swiss Re Language Services  
(9/98, 15 000 en)